THE GENESEE FARMER.

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THE GENESEE FARMER.

SATURDAY, AUGUST 15, 1835.

Diseases and Enemies of Fruit TREES.

The fact that many valuable fruit trees, and sometimes even whole orchards, are destroyed by diseases and insects, shows the importance of attention to the subject. A concise account therefore, of the various diseases and enemies to which fruit trees are liable, and the most efficient remedies which have yet been made known, may prove acceptable to young or inexperienced cultivators of fruit; especially as this information is now scattered through a great number of horticultural works, which perhaps are accessible to a few only. We therefore propose to give brief descriptions of the most formidable and common of these evils, and their respective remedies.

Apple.

The hardiness and vigor of this tree is such, and its enemies comparatively so few in the western part of New York, that little difficulty has been yet experienced in its successful cultivation. It has occasionally however, its evils to contend with. Among the most common are 1. Canker. 2. The Borer. 3. The Caterpillar. 4. The American Blight.

1. *Canker* is a disease ascribed to various causes. Some attribute it to the poorness or wetness of the soil; others to the trees being exposed in a bleak situation to frosts and cold winds; butthe most probable cause is external injuries sustained by applying ladders in gathering the fruit, leaving dead branches remaining on the tree, and by injudicious pruning. Where trees thus receive large wounds, decay frequently commences in those parts, and gradually extends until the tree dies. Wherever therefore wounds have been made, whether by pruning or otherwise, they should be protected from the air and moisture by a thick coat of paint or of a mixture of tar and brick dust. Where canker has actually commenced, either in apple or other fruit trees, the only remedy is to cut away, (with a drawing knife or other suitable instrument,) all the affected parts, protecting the freshly cut surface with a coating of paint, wax, or other similar substance. Canker is sometimes caused by pruning in the spring while the sap is in rapid circulation, as it then oozes out upon the wound, causing it to turn black and producing decay in the branch.

2. *The Borer* is an insect which perforates the wood at or a little below the surface of the earth. They may be taken out by means of a slender barbed wire, which can be introduced into the hole for this purpose. Where the hole is too crooked for this, soap suds, or a strong decoction of tobacco, injected into it, will destroy them. Whatever mode is adopted to destroy them, the operation should be repeated several times during the summer, in order completely to extirpate them.

3. *The Caterpillar* has heretofore been the most formidable enemy to the apple tree in western New York. It first makes its appearance in the spring, just as the leaf buds begin to open, when it is not the tenth of an inch long, and no larger than a cambric needle. It is then very easily destroyed by means of a brush dipped in some caustic or poisonous solution, as of lime, soap, or tobacco. It is destroyed with less ease as it increases in size. When fully grown it is two inches long and a quarter of an inch in diameter. It then spins a cocoon and passes to the pupa state, and in the latter part of summer comes out a brown miller. It then deposits its eggs near the ends of the smaller branches, in the form of a band or broad ring round them, each ring of eggs containing about five hundred. These may be cut off and destroyed at any time during the autumn or winter. Every ring of eggs thus destroyed, will prevent a nest of caterpillars the next season.

4. *The American Blight*, (so called,) is caused by the *Aphis lanata*, a small insect, so thickly covered with fine white hair as to appear enveloped in fine cotton; hence it is sometimes, and more appropriately, termed *white blight*. In England, apple trees have been greatly injured, and sometimes destroyed by it. The insect is described as furnished with a fine bristle-like beak, with which it pierces the bark and abstracts the nourishment from the cambium or newly formed sap wood. The sap wood being thus wounded rises up in excrescences over the whole surface—the limb grows sickly, the leaves turn yellow, and the branch perishes. Branch after branch is assailed in turn, until they all become leafless and the tree dies. The insect spreads from tree to tree, by being carried on the wind by means of its long cottony tufts of hair. It is easily destroyed on young trees, and those older which have been recently attacked, by coating over with a painter's brush, the affected parts, with a mixture consisting of equal parts, by weight, of rosin and fish oil, melted together and applied warm. This prevents the escape of the insects and stifles them. The operation should be performed early in the season, or as soon as the hoariness occasioned by the insects, appears on the branches. As this insect has as yet been introduced into this country in but small numbers, it becomes important to watch it closely, and destroy it now at the outset before it becomes extensively spread. The application of soft soap has been recommended for its destruction when it first appears on trees from infected nurseries.

The canker worm is perhaps the most destructive insect to apple trees which has infested American orchards, but it appears to have been hitherto confined to certain parts of the country only, particularly of New England. It ascends the trunks of the trees in the spring and in a short time destroys all the leaves of the tree, and thus eventually causes its death. The most common method is tarring daily the body of the tree, during the season of its activity, and thus preventing its passing up the tree.

Quince.

The most formidable, and perhaps nearly the only enemy to the quince, is *the Borer*, which attacks the tree in the same manner as that of the apple. The same remedy is to be applied. It is said that the borer may be excluded by inclosing the lower part of the trunk in tan or unleached ashes during the spring months. Grafting the quince above ground on pear stocks, will also in a great measure save it from the attacks of the borer, as the pear is rarely touched by it.

Pear.

The pear, in common with the apple and other trees, is liable to occasional attacks from the caterpillar, and sometimes from a few other insects; but its great and peculiar malady is the *Fire Blight*. This first affects trees generally during the early part of summer, sometimes later, causing the branches and leaves suddenly to turn black and die. It is attributed to a very small insect (*Scolytus pyri*) which eats a small circular ring under the bark, round the branch, thus cutting off the upward flow of the sap. Where the insect has been discovered, it has been some inches below the affected part. The only remedy is to cut off the diseased branch immediately, at some distance below, and commit it to the fire. This course when faithfully and unremittingly pursued has been found entirely effectual in preventing the ravages of this formidable enemy of the pear. Some attribute fire blight to other causes than the work of an insect, but all agree that the only effectual cure is to cut off and burn the limb.

Plum.

The principal enemy to the plum, as well as to all smooth stone fruit, is the *Curculio*. This is a small beetle or bug, about a quarter of an inch long, (its head and thorax resembling at first glance, a long beax, serving at once to distinguish it,) which punctures, and deposits its egg in the young fruit. A worm proceeds from this, which feeds upon the fruit, and causes it prematurely to fall to the ground; when the worm passes immediately into the earth, and continues (as is supposed) in the pupa state during winter, and the next season comes out in the perfect state to propagate its species by again puncturing the fruit. Now if, when the fruit falls, it be destroyed immediately, before the worm escapes, the fruit of the succeeding year will be saved. This may be easily effected by suffering a number of swine to feed among the trees to devour all that fall. But where swine cannot be admitted, the best way is to jar down the insects during the time of laying their eggs, by a stroke of the hand or of a mallet, when they may be caught in white sheets of cloth spread under the tree to receive them, and destroyed. Where this operation has been performed two or three times a day, it has soon cleared the tree of them.

The plum tree is liable to a disease sometimes called canker; which is an excrescence upon the branches, at first green, and afterwards becoming black; the diseased branch soon dies and

the whole tree gradually perishes. It is prevented by cutting off all the affected branches as soon as the disease appears, and burning them. By seasonable care, it may thus be prevented from doing further mischief with little trouble.

A large number of plum trees in this state suffered greatly from some unknown cause, in the early part of the autumn of 1833. The leaves fell prematurely, in consequence of which the fruit was not perfected, and the trees themselves received a check from which many of them did not recover. A large number have since died; many however, perhaps the greater part, are now recovering, and some have resumed their former thriftiness.

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Peach.

The peach is particularly subject to the attacks of an insect called the *Peach worm*, and to a disease known by the name of the *Yellows*.

1. The *Peach worm* is produced from the eggs of a lepidopterous fly (*Ægeria persicæ*) which deposits its eggs during summer in the bark of the tree near the roots. The worms which these produce, penetrate the bark to the external surface of the wood, and commence the work of destruction, sometime devouring the inner bark entirely round the tree, and speedily causing its death. It is rare however, except in very small trees, that death is produced, as the worm seldom eats completely round; in which case the injury only retards its growth. Its presence is readily detected by the gum filled with excrementitious matter, which oozes from the tree, near the surface of the ground. The best remedy is to remove the earth from round the foot of the tree, together with a small portion of the injured bark, when the worm will be exposed and may be readily destroyed. All the holes should be traced to their end, in order to see that the tree is cleared of them, cutting the bark as little as possible so as not to injure the tree unnecessarily.

2. *The Yellows.* This disease is by far the most formidable evil which the peach has to encounter. It is entirely peculiar to the peach and nectarine. Its cause is unknown. It is first indicated by the fruit ripening three or four weeks earliear than usual, generally with red specks and blotches upon it. This commonly takes place on a part of the tree only. The following season, a number of very small wiry shoots grow from the larger branches, the leaves become yellow, the whole tree assumes a sickly appearance, and eventually perishes. What renders this disease the more to be dreaded is its contagious nature. If not checked, it commonly spreads through the orchard. The infection is supposed to be communicated at the time of flowering by the pollen or farina which is carried from tree to tree; the fruit thus receives the malady, which is quickly carried by the circulation of the sap through the branches and trunk. The disease is also always communicated where a bud from an infected tree is inserted on a healthy one; and even by pruning a healthy tree with a knife which has been previously used on a diseased one. After it has once attacked a tree, there is no remedy; it must inevitably perish. Wherever therefore a tree is seen ripening its fruit prematurely, especially if that fruit be marked with red blotches unusual in it, it is to be looked upon as a lost tree—nothing can save it; and nothing can save adjacent ones from becoming infected but by destroying it before it blooms again. No peach tree should be planted on the same spot until several years of intermediate cultivation; perhaps it will be best in most cases to plant fruit trees of some other species, which are not attacked by this disease, in places where such peach trees have stood.

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Nectarine.

This fruit tree is subject to the same diseases as the peach, of which indeed it is considered as but a variety; and the same remedies apply to both. Its fruit is also subject to the attacks of the curculio, for an account of which, see the article on the *plum*.

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Apricot.

The principal enemies of this fruit, are 1. *The worm* or *Ægeria*, which has been described in the account of the peach; and 2. *The curculio*, described in the account of the plum.

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Cherry.

In western New York, the cherry has but few diseases or enemies, and those of little importance. Some varieties are attacked by an insect which causes large excrescences on the branches. Whenever these appear, they should be immediately cut off and committed to the fire. Perhaps the greatest enemy is the *Cedar bird*.* The only known way of repelling them is to thin their ranks by means of power and shot, when they become suspicious and fearful, and less voracious in their depredations. Small trees of choice varieties may be protected from the birds by covering them with a large coarse net, made of bass matting or other material.

The Crops.

Our farmers are now busily engaged in harvesting their wheat, and we are gratified to learn that the favorable weather of the last six weeks has been such that the crop is far superior to what was anticipated in the spring, though it will fall considerably short of what is considered an average yield in this section.

A correspondent at Waterloo, under date of the 26th ultimo, writes, "I have just seen W. G. from Ledyard, in Cayuga county, and he says our wheat crop is one third better than theirs. *Our north towns never had better crops*—the ear is very large. Although in this neighborhood some was winter-killed, the very long heads of the remainder will nearly compensate for the loss.

"Corn, hay and oats will yield abundantly."

The following is an extract of a letter from Willis Gaylord, of Onondaga county, dated August 4:

"Our hay is mostly secured, a good crop, but late, and in tolerable order. Harvesting has commenced with spirit, and the wheat, owing to the singularly favorable weather of the early part of summer for winter damaged grain, will exceed our expectations. The barley crop is very heavy—better as a whole than I have ever known it in this country. Oats promise well, are thick and well headed, but owing to so much cloudy if not wet weather, are more inclining to smut than usual, and the same remark may be applied to barley. Corn looks doubtful, and a slight frost on the night of the 3d of August does not speak favorably as to a late warm fall. Fruit is, and will be abundant. Cherries were so plenty, that after the cedar birds had received their share, and they and some other birds were not backward in presenting their claims, enough remained to severely effect many of the immoderate eaters. These cedar or cherry birds are a real nuisance in a fruit garden, and I should like to see a sketch of their habits, place of breeding, winter residence, &c."

There has as yet been little new wheat brought to the Rochester Market—none, indeed, worth mentioning. The price is, nominally, $1.00 per bushel.

* This is a small bird about the size of the blue bird, of a light brown color, readily distinguished by its crest: and is by its voracity very destructive to ripe cherries.

Fruit.

There are few if any districts in our extended country more favorable for the cultivation of every variety of fruit than that known as the Genesee Country; and we are rejoiced at the increased attention which all classes of its citizens are devoting to its introduction and culture. Each year adds largely to the number of choice varieties of Fruits, which are exhibited in our market. We have several times been treated by our friends with a taste of the "first fruits" of the season as they have arrived at maturity, and have now to acknowledge the receipt of a liberal basket of ripe *Plums* from the Garden of Mr. G. W. Hanford of this city, called *Smith's Orleans*, but we believe erroneously, as it is too early for that variety. It is more likely to be the *Early* Orleans. It is a superior Plum both as to flavor and size, measuring from four to five inches in circumference.

Mr. Swan has placed a show case in his store on the corner of Buffalo and Exchange streets, for the exhibition of choice fruits, and has favored us with the following list of Fruits, which may now be seen there:

APRICOTTS:
- Early Peach, from L. B. Langworthy, measuring six and a half inches.
- Large French, from H. N. Langworthy.
- Seedling, from the same.
- French, from Erastus Cook.

APPLES:
- From Spencer Davis, measusing ten inches—name unknown.

PEACHES;
- Nutmeg, from Harry Pratt.

PLUMS:
- Smith's or Early Orleans, from G. W. Hanford.
- Cooper's Large, from J. B. Bryan, Penfield, five and a half inches.
- Seedling, from Wm. Pitkin.

Improved Agricultural Implements.

We refer with pleasure to the statements we this week publish in relation to Mr. Hussey's *Grain Cutting Machine*, which it will be seen has been successfully tried in this county; and we may add, that the gentlemen whose names are attached to the communication, are numbered among our most successful farmers. The machine needed not this additional testimony to convince us of its utility, as we had full confidence in the statement heretofore given in our paper, by W. C. Dwight, Esq. of Moscow; but people generally are slow to adopt new inventions, and it is therefore necessary that the most convincing proof be furnished before they will

leave "the good old way," for a new and untried one. In this view, we deem the present certificates important.

We also present in this paper, in the communication of "W. G." the claims of the *Horse Rake* to the approbation of haymakers. So uncommon is this useful implement in our immediate neighborhood, that we could not, a few weeks since, find a mechanic in this city who had ever made or seen one. Were our farmers aware of their value, they could be as readily obtained as any other agricultural implement. A letter just received from a subscriber in Ohio, says—"The plan of the Horse Rake made known to me in the Genesee Farmer has saved me this season more than enough to pay for the paper five years. It works admirably."

Ornamental Plants.

In recent publications, we find notices of the following ornamental plants, most of which appear to have been but lately introduced to cultivation.

Diplopappus incanus.

This plant was discovered by the late David Douglas in California. It resembles an Aster; and has purple flowers of peculiarly bright colors. It continues to blossom in the open border in England till late in autumn. Even there however it requires the protection of a frame; and doubtless with us must become an inmate of the Green-House.

Chelone centranthifolia.

This species was introduced from California in 1834. It is said to be a hardy perennial three feet high, and flowers through most of the summer and autumn. It much resembles *Chelone barbata*, but differs from it in having "a larger and very graceful panicle with more slender flowers." It is easily cultivated.

Penstemon Richardsonii.

It was discovered by David Douglas near the Columbia river. The Conductors of the American Gardener's Magazine (which is a work of great interest to the florist) say, "It flowered in our garden until fall; and stood the severity of last winter unprotected. A very desirable perennial with rich purple flowers."

Mimulus luteus rivularis.

This "has proved with us to be a hardy plant, having withstood the severity of last winter without any protection—the situation was very low and damp."—*Amer. Gard. Mag.*

Verbena sulphurea.

It is said to be a hardy perennial from the mountains of Chili. It is a neat pretty plant with sulphur colored blossoms, and grows six inches high. It is propagated by layers and cuttings.

Physostegia imbricata.

A hardy perennial from Texas. In appearance it resembles the Dragon's Head (*Dracocephalum virginianum*); but is "much taller, the leaves more numerous and crowded, the flowers dense, nearly erect, and closely imbricated." It is highly ornamental; grows six feet high, and flowers through the latter part of summer and autumn.

Gladiolus natalensis.

The Conductors of the American Gardener's Magazine say "*G. natalensis* has proved perfectly hardy, having stood out through the last severe winter. This will render it doubly valuable, as it may with *G. communis, G. byzantinus* and others, be planted in beds or masses in the open border."

Tritoma Burchellii.

A native of the Cape of Good Hope, but hardy. The stem grows two feet high, and is crowned "with a dense raceme of brilliant yellow flowers." A most desirable plant.

From the New York Farmer.

Hops.

The opinion of intelligent and practical men, or rather the result of their own actual experiments, are of great value. This applies particularly to small farmers, whose operations being on a limited scale, receive their immediate personal attention. In looking at such results, however, those who farm on a large scale are liable to be led into error in expecting that the same will follow an extended cultivation, forgetting that the success is in many cases mainly to be ascribed to this minute personal attention, stimulated and strengthened by self-interest. In extended concerns, that attention cannot always be given; and as much hired labor is employed, the powerful motives of interest do not operate. The large and enterprising farmer, therefore, must take this into consideration; as concerns extend themselves, his risks are multipled; and, if the results of his cultivation are not proportionately correspondent to those of the small farmers, he must often place it to the account of circumstances absolutely beyond his control. Nothing valuable in this world is accomplished without perseverance, labor, fidelity, and attention. This is one of the wise provisions in the constitution of things; one of the beneficent laws of a righteous Providence. On the other hand, labor, perseverance, fidelity, and attention, seldom fail, in ordinary circumstances, of reasonable success. The business of the farmer particularly demands his attention, and his ill fortune may be but too often traced to neglect, to this want of personal attention, to the division of his care among other pursuits, or to a miscalculation in extending his operations beyond his power of immediate and carful superintendence. These remarks often occur to me in my visits among our small farmers, with whom I have been much in the habit of familiar, agreeable and instructive intercourse; whose affairs are managed under their own immediate and constant personal attention, and among whom I often meet, with the highest pleasure, with examples in a smal! way of eminent success. I have been long accustomed to note the observations of such men, and to gather and record any facts which they have been kind enough to communicate, where I knew I could rely upon the correctness of their statements. I now send you some information, obtained in this way, in relation to the cultivation of hops by two farmers, who cultivate a small farm in partnership, in a town in Vermont, on the Connecticut river.

Messrs. D. &. H. in 1833, from four acres obtained 3000 pounds, which sold for 20 cents per pound. In 1834, from five and one half acres they obtained 4000 pounds, which sold for 15 cts. per pound. In 1833 they judged that their land, after deducting all expenses, yielded an income of $100 per acre.

Hops are planted 8 feet apart in hills. The cuttings are planted, and Indian corn is cultivated among them the first year, about half as thick as when planted by itself. The corn and hops are hoed at the same time. The second year the hops are polled and the crop gathered.

Green barn manure is thought to be injurious to the vines. Fall manure, or compost, is deemed best. The hills are opened in the spring; the vines are then trimmed, the ground loosened, and the manure applied to the hill. The field must be kept clean of weeds. The hops are gathered by hand. Women are employed in the picking at 20 cents per day. They require to be kiln-dried immediately, as they are very liable to be injured by heating in the heap. From 45 to 75 lbs. are kiln-dried at a time, and the process of drying occupies about 12 hours. After drying they are put into a heap and suffered to sweat a little, and then conveyed to be packed and bagged, which is done by a screw press. They are packed and screwed for about $5 per ton, and are then sent to market without delay. The manner and condition in which they are put up is of the greatest importance, for if the inspector discovers, on trying the bag, the least defect, the whole bag is condemned. Spruce poles for hops about 15 feet high cost here one cent a piece. Messrs. D. & H. gave 25 cents per one hundred, and cut them for themselves. They will set this year about 4400.

The market price of hops is very fluctuating, and the risk of curing them well is very considerable, and requires great experience and care. The ordinary yield per acre I am not able to state, as it varies greatly. In some parts of the state they are extensively cultivated; and on land which, without great attention, would make very small returns. A farmer in Boxborough, Mass. recently from five acres of land gathered 10,000 pounds; and I have been credibly informed that a farmer on the river, about 13 miles above this, the year before the last, received from twelve to fourteen hundred dollars from the sale of his crop of hops. The cultivation, I am persuaded, might be extended to great advantage, as there is little fear that the market will be oversupplied. It must not be forgotten, however, that the quality and condition of the article, when sent to market, is of the last importance. Good hops will always command a fair price. Damaged or ill-conditioned hops are worthless. H. C.

Meadowbanks, May, 1835.

Peach Trees.

Peach trees may be preserved, by good management, twenty, and probably fifty years. They are destroyed from north latitude forty to thirty-six degrees, by a worm which feeds on the inner bark of the tree, at its root. This worm is said to be the offspring of a fly of the wasp kind, which deposits its eggs in the bark of the root of the tree while it is young and tender. The remedy consists in searching for the openings of the bark at the root, and taking them out. If this operation is repeated three or four springs the worm never after can make a lodgment there. The bark of the tree by this time becomes so hard, that the fly cannot make the puncture, in order to deposit the egg, or if deposited it perishes. After the worm is cut out in the spring, draw the earth up around the body six or eight inches above the other ground.

Of all the fruit trees produced in this climate none bears pruning so freely as the peach: indeed, it should be treated very much as the vine is. All those branches which have borne fruit should be cut out, if there is young wood to supply their places. Proof—take a limb which has borne two or three crops of fruit, and notice its produce; take another on the same tree which has never borne at all, and the fruit on the last will be twice the size of the former, fairer, and less liable to rot. In pruning the branches should be taken or cut out of the middle of the tree; thus giving more air and sun to the fruit on the outer limbs.

The peach tree produces best fruit when the ground is not stirred about it while the fruit is on. When it has no fruit it should be cultivated as carefully as a cabbage, or any other plant.

The above comprises the most important points in the rearing of peach trees, and good fruit; if attended to, I have never known them to fail,—and my experience has not been very limited.

I repeat what may perhaps be doubted, that the peach tree, if the worm is kept out of the root, will live, at least, twenty years; and that this may certainly be done by attacking them the first year of their growth, and continuing to extract them for three or four years in succession, not forgetting to draw the earth up as directed. Straw, chips, or trash of any kind, serve the purpose just as well.—*N. Y. Farmer.*

COMMUNICATIONS.

The Horse Rake.

BY W. C.

The tenacity with which our farmers in general cling to the habits and the modes of other days, and the reluctance with which they adopt the most unquestioned improvements in farming, is truly astonishing. The neglect, if not the actual opposition, which the advancement of agriculture receives, and the contempt with which most improvements in the mode of farming and the implements of husbandry are treated, originates too frequently with those they were intended to benefit. The true rule of conduct with the farmer should be, "to prove all things, and hold fast to that which is good." When an innovation on the system he and his fathers have practiced is presented to him, let him not superciliously reject it, but weigh it coolly in the scales of common sense, and if, notwithstanding its novelty, it appears reasonable, let him give it a fair trial, and be governed by the result. So when any labor saving machine is proposed, let him examine its merits, its suitableness for his farm, (for machines such as the wheat cutting machine, or the threshing machine, which might be advisable or indispensable on a farm of five hundred acres, would not be proper for one of only fifty,)—let him estimate the utility it would be to him were he possessed of it—in short, let him view all the circumstances of the case, and thus be enabled to decide correctly on its adoption, or rejection. There are some labor saving machines which, in spite of the prejudices they were at first compelled to encounter, have forced themselves into general use. Of these one of the most prominent is the threshing machine, which in grain growing countries has entirely superseded the use of the flail, and the tedious and wasteful operation of hand threshing. For the *horse rake* a similar triumph over vulgar prejudice and long established habits may be confidently anticipated. We scarcely know of a farming implement which economizes time and labor in an equal degree, and at the same time combines so much simplicity and ease in use and construction. With the revolving rake we have on our farm, a man and horse will rake into winrows faster than two teams can draw the hay, and perform the raking after in addition. Unless the horse is thoroughly at command, a boy for a rider is necessary, but we dispense with one altogether. Perhaps the single horse rake, of which an engraving has been given in a previous number of the Farmer, will be found the best adapted for farms that are not entirely leveled, and they are much more simple in their construction than the revolving one. Almost any common mechanic can make one in a day, and they will be found very useful for many purposes besides raking hay. Peas are gathered by the horse rake with great facility, and most wheat growers will be amply repaid by the gleanings of a single harvest for the expense of the implement. When we procured our revolving rake, it was looked upon by some of our neighboring farmers with suspicion, and regarded as a very doubtful affair, and the most encouraging greeting it received from any was the half condemnatory phrase—"we should like to see that thing work." The "thing" however worked, and worked well, and rakes either single or revolving are becoming quite common, much to the gratification as well as profit of their owners. W. C.

Hussey's Grain Cutter.

Mr. L. Tucker—In complying with your request of July 25, I would say that Mr. Horsford called on me with *Hussey's Grain Cutter* on the afternoon of Tuesday the 28th of July. He commenced exhibiting in cutting wheat to about two hundred spectators from this and the neighboring towns. He had, however, but just commenced cutting, when he had to give it up, there being a small defect in the mechanical part of the machine. The spectators were disappointed in not seeing what the machine would do. Mr. Horsford left with it, apparently not less disappointed than the spectators. He returned on Saturday with the machine, and after collecting a few of the neighboring farmers, he put it in operation in wheat yielding from twenty to twenty-five bushels per acre. He cut about half an hour with neatness and despatch in several throughs of thirty-five rods—he cut a swath in one minute making sixteen gavels per through. It cuts a swath five feet wide and cleaner than I have ever seen it cut in any other way, taking every head that is above the cutter. The grain is left in gavels of suitable size for binding, spread nearly across the swath and as straight as if it had been cut with a sickle. The machine is drawn by a pair of horses, they going by the side of the grain, with a driver and a man to drop the gavels for the binders, both riding on the machine. The horses may walk or trot. Two acres per hour would be fair business. I am confident the machine may be profitably used on most of the wheat growing farms in this section. The machine will not work where the stone or stubs are so high as to come in contact with the cutters.

Mr. Horsford of Moscow, Livingston county, is agent for Mr. Hussey's Patent Grain Cutter for this state, and is ready to furnish rights for counties and towns, or individual rights, on liberal terms. He has made arrangements for building machines at Moscow.

Yours respectfully,

August 3, 1835. Rawson Harmon, Jr.

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Wheatland, August 3, 1835.

Mr. Tucker—On Saturday last we had an opportunity of witnessing the operation of Hussey's Grain Cutting Machine on the farm of Gen. Harmon in this town, and we can truly say that our expectations were more than realized. It cuts and saves the grain cleaner than any other method of harvesting that we have seen, and leaves the grain in gavels suitable for a sheaf. It cuts in middling wheat, at a common gait, about 15 or 16 sheaves per minute, and might have been moved much faster, and we are decidedly of the opinion that on smooth fields it is a great saving of labor and of grain. The machine was managed by Mr. Horsford of Moscow, of Livingston county. Yours,

Jirah Blackmer,
John McNaughton,
Donald McNaughton,
Elisha Harmon,
Rawson Harmon.

To Destroy Caterpillars.

BY J. S. W.

The following simple contrivance has been found effectual in keeping caterpillars from fruit trees, where they have been so numerous as to destroy almost all the herbage within their reach.

First clear the trees of every caterpillar, by shaking them off or otherwise, and then wrap a little coarse wool around the body of the tree, making the outer edge extend as far as possible, without leaving crevices for them to crawl through, and picking open the under surface to let the wool hang in a rough shaggy manner; but very few caterpillars will ever pass the barrier, but vast numbers will make the attempt. J. S. W.

N. B. I wish to inquire if any of the numerous readers of the "Farmer" can furnish for its columns the natural history of the Army Worm.

Culture of Wheat.

BY A PRACTICAL FARMER.

Mr. L. Tucker—If you think these few and and hastily written remarks of an inexperienced writer worthy of a place in your excellent paper, you are at liberty to publish them.

Wheat being the most important crop raised by the farmers of Western New York, a few remarks on its proper cultivation may not be improper or useless. Almost every farmer believes he knows how to cultivate his land so as to secure a good crop, yet how few actually raise good crops, while those who do not are ready to impute their want of success to insects, rust, an unfavorable season, or some other cause which they might and ought to have guarded against. It cannot be denied that natural causes have a degree of influence on the growth of all kinds of crops, yet the same cause or causes that injures one man's grain would another's, cultivated under similar circumstances and in the same manner. It is plain, therefore, so far as natural causes operate, that they tend to produce a uniform crop, not the wide difference which frequently occurs in neighboring fields. Is it not reasonable then to conclude that the vast difference in the success of different cultivators arises from some cause or causes within their control?

Some varieties of soil are undoubtedly better adapted to the cultivation of wheat than others, producing sometimes bountifully under almost any cultivation, and yet failures often occur in these most favored soils, while excellent crops are annually raised by good cultivation on almost every variety of soil in our section of the state. Under these considerations, it is believed that a good and judicious or proper preparation of the soil and seed, and sowing in proper season, will generally ensure a good crop. From the high price of manual labor, to secure, and the want of a sufficient market for a large supply of summer crops, the greater portion of our wheat must undoubtedly be raised on lands prepared by the process of summer fallowing, especially if the soil is hard and the surface rough, or by ploughing in a clover lay once, if the soil is mellow and smooth.

In either case, once in two years is as often as the farmer can expect a good crop. If the land is pastured or mowed, it is best to sow but once

in three years, if you would have your crops gradually increased rather than diminished. But the land must also be prepared and sown in proper season. For this no definite time can be specified. The farmer must exercise his judgment. But the error to be avoided is not to plough and harrow wet lands when too wet, and cold or dry soils when too dry. If you summer fallow, the first ploughing ought to be done from the first of June to the tenth of July, the hardest soil and the toughest sward requiring the earliest attention in order to be completely rotted in season. If the field is pastured with sheep during the season the crop will be considerably increased, and at least one day's labor with a team may be saved for each acre. Plough and harrow alternately until the clods are completely broken and pulverized—from two to five times is generally sufficient, and each operation ought to be well performed; and here it may be proper to add, that harrowing ought always to be the last operation previous to sowing if you would have the seed vegetate evenly and vigorously. If a clover lay or some other green crop is to be used, perhaps once ploughing on dry soils, if the sward can be completely inverted, and repeated harrowing, until the surface is sufficiently mellow, is the best preparation. If it is desirable to sow after a fallow crop, as peas, barley, rye or oats, the land should be immediately ploughed or thoroughly harrowed after the ground is cleared, that the scattered grain may have sufficient time to vegetate—then one good ploughing with sufficient harrowing is a good preparation for the seed.

Seed should be selected from the earliest and most perfect growth, and thoroughly cleaned from rye, cockle, chess, and all imperfect grains. Too much attention cannot be bestowed on this part of the operation, if you wish to harvest a clean crop, as every kind of seed will produce its like.

It has been satisfactorily ascertained by repeated experiments of distinguished agriculturists, that steeping the seed about 12 hours in weak ley, brine, or common lime water, will prevent smut, and destroy insects, and if immediately rolled in plaster, or a mixture of lime and plaster, the crop will be sufficiently increased to pay three times the expense. To guard against worms in the soil, a mixture of slaked lime and ashes, at the rate of from three to eight bushels to the acre, harrowed in at the time of sowing, is the best preventive, and will act at the same time as a valuable manure if the land has been exhausted by too frequent cropping.

The proper time for sowing must not be in any case neglected, as an error of a few days on this point will materially diminish if not ruin the crop, but as a large crop cannot be sowed in a few days, it is better to sow a fortnight too early than a week too late—better to begin by the middle of August than finish in October or November. Clayey and wet soils ought to be sowed while the season is dry and warm, that the whole operation may be completely performed in good order, and the wheat obtain a good growth and strong root, and be enabled thereby to withstand the severities of winter and spring. Dry and rich soils may be sowed later, yet it is better to have a large growth of straw for manure than to have the seed fail of vegetating, or the young wheat killed by the severities of the season.

A few words more on the finishing operation, must close this communication, as a little neglect in this particular on some soils would be followed by ruinous consequences.

On wet soils, ploughing in the wheat in ridges from ten to twenty feet wide, with deep furrows, being well cleaned out by means of the hoe or shovel, and cross or main surface drains, (if the field has not been previously underdrained,) through the lowest part of the field so as to carry off the surplus water quickly and completely, is absolutely necessary to insure a good crop. Perhaps harrowing in the seed on dry soils with a fine harrow having a plenty of teeth, and finishing with the roller when the surface is sufficiently smooth, is the best method.

A Practical Farmer.

Macedon, August 8, 1835.

Extraordinary Bird.

BY R. T. WHEELOCK.

A young bird was seen in the town of Superior, M. T. in the summer of 1833, which in all respects resembled the red-headed woodpecker, except the color, which was wholly white, or a cream color. It was fed by an old red-headed woodpecker, was several times seen contending with the young red-heads for the same morsel, and was supposed to belong to the same family.

Remarks.—I first saw the above described bird in my cornfield, while engaged in hoeing corn. My curiosity was first excited by the color—second, by the cry, motion when on the wing, and when on trees seeking for food, all being the peculiarities of the red-head—third, by seeing it fed by an old red-head, and fourth, by seeng it fed in company with other young birds of the usual color of red-headed woodpeckers. I was within a few feet of it several times when it was on the fence and on trees, and flying in the air, but could not discover a single feather of any color except white or cream color. It was seen by several other persons. As I am no ornithologist, perhaps such instances have often been noticed before. If not, and you consider the above paragraph worthy an insertion in your paper, it is at your service.

R. T. Wheelock.

How to make Sugar and Melasses from Potatoes.

Mr. Tucker—Inquiry is made in the Genesee Farmer of April 4th, if any of your readers have made sugar or melasses from potatoes, and a call for the process of doing it.

For the information of those who like me earn their bread by the sweat of their brow, I will state, that I have been in the habit for several years past of making both my sugar and melasses from two sorts of early potatoes, and sometimes from the common sorts, and that too for quite a large family. The process, to be short and plain, is simply this:—I plough into ridges of 10 or 12 feet in width, a quarter of an acre of good soft rich land, in November, the quickest soil that I have on my premises. As soon as the ground becomes dry and warm in the spring, I proceed, without looking into the almanac or the moon, and with a common garden hoe lay off the ridges in drills crosswise, two inches deep and twenty inches apart, and having my potatoes cut with at leat two eyes in a piece, I place them in the drills five inches apart. The hoe again follows and returns the soil it had before displaced, and the planting process is completed. As soon as the plants begin to appear above the ground, I add to the former covering two inches more of earth, clearing away the weeds if any from between the drills. The tops soon cover and shade the ground so that no further labor is necessary until the crop be sufficiently mature to produce at the rate of one hundred bushels per acre, and if the Manley, as they are called, be used for seed, they will do this between the 4th of July and first of August. The process to obtain the precious extracts is as plain and simple as the above, viz: Be first in market. I always get a dollar per bushel. Twenty-five bushels will produce

25 gallons at 50 cts	$12 50
156¼ lbs. first rate American sugar, (Anti-Slavery flavor,) at 8 cents	12 50
	$25 00

The above directions are plain and short, and what farmer would not follow them to realise a result so sweet.

Obvious.

Buffalo, June, 1835.

The Silk Business.

The Silk Business, we think, is destined to do much for the ultimate prosperity of Northampton. It has been commenced here under the most flattering auspices, by intelligent, practical men. Their experience necessarily will cost them more than the subsequent knowledge of others, but somebody must first test the goodness and practicability of every project. Thus far, success has come up to expectation, and as the business is new and those most extensively engaged in it merely novices, we are much gratified at such prosperity as their experiments have already exhibited.

Mr. Whitmarsh's establishment, we suspect, is the largest and best organized Cocoonery in the United States. He has facilities for feeding near five millions of worms, but at present his number does not exceed eight hundred thousand. Another year and they will be almost beyond computation. He intends to reel his own silk, and perhaps, ultimately, will extend his business of finishing much farther. His plantation of Morus multicaulis adjoining the Cocoonery, is a beautiful and rich piece of ground. It is not surpassed for fine scenery and horticultural taste in this country. It overlooks the rich valley of the Connecticut, and embodies some of the finest alluvial soil.

Dr. Seeger, also, has just erected a Cocoonery on his grounds in King Street. His establishment will feed over a million of worms, but as yet he has less than two hundred thousand. He profers the common White Mulberry for food, being rather skeptical about the Chinese. The comparative results will be made known after a little more experience, and the preponderance of value found out between the two. Dr. Seeger has about sixteen thousand White Mulberry trees of a little more than a year's growth, enough to supply food for a million of worms. The trees which were stripped of their leaves a few weeks since, have now a fine crop for use of the second growth. They have had great attention bestowed upon them, and we have never seen upon young trees such fine foliage. Dr. Seeger has lost many worms by spiders and the black ant. The worm is surrounded by inveterate foes, but by tarring the bottom of the posts sustaining the frames upon which they feed, he has put a stop to all these ravages.

Dr. Stebbins, the diligent and unwearied Secretary of our Agricultural Society, has erected a small Cocoonery, and has about twenty thousand worms. We are indebted to him for the first genuine Chinese seed imported into this country, and also for much practical information on the

subject of the Mulberry. A number of other individuals in town are cultivating trees of both kinds, and gradually, as people see the good results of the experiments of others, they are embracing the business of raising Silk Worms.—*Northampton Courier.*

Fall Sowing.

The communication of Mr. Boynton on sowing mulberry nurseries in the month of August, which we published in our last number,* and the almost entire failure of the seed sowed the last spring, has drawn our attention to fall sowing, and convinced us that, with a trifling extra labor and expense, the plants from seed sowed in the fall, may be made to attain nearly the height the second year, with those from seed sown the preceding spring. The plants from seed sown in the spring are often killed to the root by the frost of the succeeding winter. Early in the spring of the second year, the roots throw out shoots which grow luxuriantly, but the growth of the first year is, in such cases, entirely lost. Now if they are sown in the fall and protected through the winter, the first year's growth is saved, and consequently they are nearly as large as those sown the preceding spring, being unprotected. Mr. Boynton proposes protecting them by covering them with straw and horse manure.

This is doubtless a good method, as it accomplishes two objects at once, protecting the plants and manuring the ground the second year.

A gentleman of this neighborhood, who is engaged in the culture of silk, has suggested to us another plan for protecting them through the first winter, with which we are much pleased, both on account of its affording complete protection to the young plants, and the little labor attending it. It is to sow the seed in troughs, or long boxes, which may easily be carried into a cellar and kept through the winter. Take three rough boards of about six inches in width, and of lengths to accommodate the dimensions of the cellar into which they are placed, and nail them together in form of a box with bottom and sides, and at each end nail a piece of board of the same width. You have now a long box which may be filled with suitable earth, and the seed sown in the usual manner. These boxes may be sunk in the ground to promote moisture, or left upon its surface and weeded and watered as occasion may require. Before severe frosts they should be carried into the cellar to remain through the winter.

In the spring a furrow may be ploughed in the land, where it is intended they shall stand, and the boxes of plants taken from the cellar and placed in it. The nails may be drawn out, and for which purpose the heads should be left out a little, and the box taken to pieces and removed. The earth may then be drawn up to the plants with a hoe, and they are in the same situation they would have been had they been originally planted in the common manner.

The plan is a new one, and has never, to our knowledge, been tested by experiment, and as it looks feasible we hope some of our nurserymen will give it a trial.—*Silk Culturist.*

Failure of Seed.

We regret to learn that mulberry seed sown the last spring has come up poorly, and, in many places, has entirely failed. We sowed two nurseries, at the distance of nearly twenty miles from each other, from both of which we shall not get fifty plants. This failure is to be attributed to the quality of the seed, the manner of sowing it, or the season; or perhaps partly to all. The small quantity of seed of the growth of 1834, and the unusual demand for it, threw into market old seed, which, unless it has been kept and is sown in a peculiar manner, will not vegetate at all. In order to ensure vegetation from good seed, it should be soaked at least thirty-six hours in warm water, and then be sown in a rich soil, well pulverized, and covered to the depth of half an inch. After the seed is sown the surface of the ground should be rolled, or pressed down, in order that it may come in contact with the seed. Good seed, sown in this manner, will always come up well, provided the season is favorable to vegetation. If the season is cold and dry it will retard its progress, and if it too long continue it will sometimes destroy the seed before vegetation commences. Seasons of this kind admit of no remedy. But when the season is warm and dry, resort may and must be had to frequent waterings, which are easily done by the aid of a common gardening water-pot.

We hope such persons as have had their spring nurseries fail, will procure new seed, which is now in market, and sow the same ground over again the present month, taking care to protect the young plants from the severities of the coming winter in the manner stated in a communication from Mr. Boynton, on fall sowing, which will be found in our last number. We have taken much pains to procure a quantity of good seed of the present year's growth, which can be forwarded to any part of the United States by mail or otherwise.—*Ib.*

* See Gen. Far. p. 219.

Weight of Food and Product.

Various estimates have been made of the weight of food consumed by the silk worm, and the product of silk received in return. Among them is that of Count Dandolo, who calculates that 200,000 worms will consume 7,000 lbs. of leaves and that 21 lbs. of leaves will make 1 lb. of cocoons.

Count de Hazzi calculates that the same number of worms will require 10,000 lbs. of leaves in the following proportions. In the first age, 50 lbs.; 2d, 150 lbs.; 3d, 460 lbs.; 4th, 1390 lbs.; 5th, 7950.

M. Bonafous, says that 200,000 worms were sustained by 7217 lbs. leaves. The quantity, however, given them between their regular meals was not taken into the account, and the leaves were chopped during the first stages, which enables the worm to consume them with less waste.

The quantity of silk produced by the worm depends essentially upon the amount of food consumed. That is, they will make more and better silk if they have been well fed, than if they have been stinted in their food. In the early settlements in Georgia cocoons were made of uncommon weight. There were instances when two hundred weighed a pound avoirdupois; and Mrs. Davenport made some, under the direction of Mr. Cobb, two hundred and six of which made a pound. M. Bonafous averages them at two hundred and fifty-six to the pound, and a Mr. Basti of Pennsylvania made a quantity which required three hundred and six to the pound. Mr. D'Homergue fed worms from Carolina and also from France, the former made cocoons which required three hundred and thirty-seven to the pound, and the latter three hundred and eighty-seven.

Count de Hazzi calculates that from seven to ten pounds of cocoons will make a pound of reeled silk. In France twelve pounds have been required, while two thirds of that weight have given a pound of silk in this country. Mr. Cobb reeled from 8000 cocoons three pounds, including floss. Mr. Kenrick, author of the New American Orchardist, from which the following estimates are taken, says "four hundred pounds of silk for 1,000,000 of cocoons, must, I think, be deemed a large crop, and all this might easily be produced, provided the silk worms were properly attended, and the silk skilfully reeled.—*Ib.*

Preserving Eggs.

The cocoons selected for seed should be firm and of the largest size. After having stripped the floss from them they should be strung together and hung up in a warm airy room or chamber partially darkened. In about two weeks from winding, the moths will emerge from the cocoons. The male is known by its smaller size and continual fluttering of its wings; after having been paired and remained together during the day, they should be separated by the wings and the females placed upon sheets of paper, where they will deposit their eggs. It is computed that one hundred females will produce an ounce of eggs, and an ounce of eggs will produce forty thousand silk worms. The papers on which the eggs are deposited should be rolled up and put in tight boxes and placed in a cool dry cellar where they will not freeze. If it is required to keep them late in the season for a second crop, it may be necessary to have recourse to the ice house.—*Ib.*

Prospect of the Silk Business.

It is very gratifying to know that the attention given to the subject of growing silk is likely to result the most favorably to this country. Men of intelligence and enterprise throughout the United States, from the North to the South, and to the West, are engaging in the culture of the mulberry tree as food for the silk worm, and are making arrangements to carry forward the business with an ardor highly flattering to the success of the project. Many have commenced rearing the worm and have met with success equal to their expectation. There are now several societies in existence for the purpose of forwarding the object, and seven companies are already formed for manufacturing the article. Silk must eventually become one of the staple productions of the United States.—*Ib.*

Multiplying Chinese Mulberry by Layers.—The following methods have been recommended:

1st. To put down the branch or tree and cover it with earth and keep it in place by forked sticks, with the end of the layer out of ground.

2. To cut off the end of the layer, to check the extension and accelerate the growth of the sprout from the bud.

3d. Make a small incision under the bud.

4th. Make a double incision around the layer between each bud, and remove about 1-16 of an inch of bark, to check the circulation of sap.

5th. To make a ligature between each bud of twine or small wire for the same purpose.

From the American Farmer.

Sheep Husbandry.

Ravensworth, March 25, 1834.

Dear Sir—I have thought it not impossible that in the present depressed state of agriculture, the following estimate of the profits of a farm devoted exclusively to sheep, might be of service to some of your numerous readers. I am not, I think, mistaken, in supposing, that at the price at which corn and wheat now sell, they cannot be advantageously cultivated on lands yielding less than fifteen bushels of the former, and eight bushels of the latter per acre. And yet how many thousands of acres, both in Virginia and Maryland, are either thus employed at an expense very far exceeding their production, or are abandoned as wholly unfit for any agricultural purpose whatever!

My own experience has satisfied me that lands of this description, even of the poorest quality, may, (if broken and tolerably well watered,) be advantageously converted into sheep-walks; and by a judicious course of husbandry, be made not only to produce a fair interest on the capital invested, but to furnish within themselves ample resources for their own renovation. To point out the means of accomplishing this desirable change is the object of the following estimate.

Very respectfully, yours, &c.

Wm. H. Fitzhugh.

J. S. Skinner, Esq.

Estimate for a Farm devoted exclusively to Sheep.

A farm, containing 1000 acres of land, under a good fence, having a dwelling house and all necessary out-houses, together with two milch cows, two work horses, (or four oxen,) two breeding sows, one thousand sheep, a light wagon, cart, gear, ploughs, harrows, hoes, spades, axes, and all other necessary utensils, may very readily be purchased in convenient locations, either in Maryland or Virginia, for $12,000; which if it yields only six per cent. on the purchase money, or

$720 nett per annum, would be a more profitable and safe investment than can be made in any stock in the United States. But it is susceptible of demonstration, that with tolerable judicious management, it may be made to yield nearly double that amount, and be itself annually improved in value.

The following is the system of management, which, after long experience, I have no hesitation in recommending.

The farm, and every thing appertaining to it, except the sheep, being secured at the beginning of the year, the first operation should be to throw it into three divisions, viz: two fields for grazing, of 350 acres each, and one of 300 acres, comprising the woodland, garden, house lots, and about 100 acres of open land for cultivation and improvement. This arrangement and the necessary fences may be completed during the freezing and wet weather of January, February and March; while the dry and open weather of those months should be devoted to ploughing and harrowing about 40 acres of arable land; one half of which may be sown in oats, for a crop, by the end of March, and the other half planted in corn between the 1st and 15th of April.

These operations being completed, there will be time enough before the corn requires cultivation, to plough, harrow, and sow down in oats, ten acres more of the arable land, for the purpose of improvement, by folding the sheep and cattle in them during the summer and fall; after which the chief occupation of the hands until harvest, will be the cultivation of the corn and attention to the sheep, which ought to be purchased and brought on the farm as early in May as possible, and together with the cattle be folded every night on the oat grounds prepared for them, in a pen containing about half an acre of land.

As this business of folding is to be the great source of improvement and profit on a sheep farm, it ought to be managed with the greatest care. No danger need be apprehended to the sheep either from dogs or disease, provided cattle be always folded in the same pen with them, and care be taken never to put them up till after sunset, and always to turn them out before sunrise. With a view to the rapid and permanent improvement of the soil, I consider the following the best possible mode of conducting this part of the system.

When the first fold is sufficiently manured, (which will be eight or ten days,) the pen should be removed, the ground ploughed, harrowed, and sowed down in oats and ruta baga turneps; and the same process be pursued with each succeeding fold, till the first of August; care being taken in the mean time to turn in all that portion of the land prepared for folding, on which the oats have ripened before the folds have reached them.

On the 1st of August, the sheep should be divided into two flocks—one containing the breeding ewes and stock wethers; the other consisting of the lambs and such old ewes and wethers as it may be desirable to prepare for market. At this time too, the folds should be brought back to the ground first penned and sowed in oats and turneps, which will now be covered with a fine growth, and be ready for a second penning. In performing this operation, two pens must be employed for the two divisions of sheep; the lambs and the muttons being permitted to occupy each pen, in advance, about four days, and the main flock following for about the same time.

Lands thus prepared will be brought to the highest possible state of fertility. Such as are penned before the first of September, may be sowed down in turneps, for the use of the sheep during the winter and spring; and the subsequent penning of September, October, November and December, may be put in rye, wheat, kale, Hanover turneps, or any thing that vegetates quickly, for spring grazing. A piece of the poorest land on my farm, treated in this way, (except that wheat as a crop, was substituted for turneps, oats, &c.) fattened me fifty of the best muttons I ever saw; yielded 23½ bushels of wheat to the acre, and is, at the end of three years, still covered with a fine coat of orchard grass.

We have now arrived at the period of the year in which the sheep are to be put into winter quarters. For this purpose the fatted sheep ought to be sold off as soon as possible, the breeding ewes put to themselves in one of the grazing fields, and the rest of the flock in the other. Each parcel should be brought up at night into a small lot near the house, provided with uniform shelters, and there fed both night and morning, on hay, corn tops, blades, or turneps. As the ewes begin to yean, which ought to be in March, they should be separated, or permitted to run on the ground prepared for them during the preceding fall; and their condition will be very much improved at this time by feeding them night and morning with oats in the straw, cut up to a proper degree of fineness.

The operations of the next and every subsequent year, will differ from the first only in this, that instead of breaking up new ground for an oat crop, oats may always be put in the twenty acres of corn land and the ten acres of manured land of the preceding year; and the last should always be sowed down at the same time in orchard grass and clover. Ten acres of highly improved grass land would thus be added every year to the resources of the farm, until at length its quantity would probably justify the introduction of a few choice brood mares, as another source of profit, on the farm.

When the hundred acres first reserved for cultivation shall, by this process, be converted into grass land, a farther encroachment, to the extent of fifty acres, may be made on each of the grazing fields, and the same course of husbandry be pursued on them as on the first disvision.

The only permanent laborers requisite for such a farm as this, would be a man, his wife, and a boy old enough to plough. In shearing time and harvest, it might be necessary, perhaps, to employ additional labor.

The above system is adapted to the poorest description of high and broken lands in our country, and may be applied to a farm of any size, from two hundred to some thousand acres. I have now five farms, stocked with from two to five hundred sheep each, undergoing this process; and after experience of many years, and even at the present low price of wool, I have no disposition to change my system.

The following I consider a fair estimate of the product, expenditure and profits, of a farm of 1060 acres, thus cultivated.

Product. To be used on the Farm.

20 acres of corn manured in the hill, at 3 barrels per acre,.....60 bbls.
20 acres of unimproved land in oats, at 5 bushels per acre,.....100 bush.
10 acres of manured land in oats, at 20 bushels per acre,.....200 bush.
5 acres of turneps, at 200 bushels per acre,.....1000 bush.
Hay, veal, hogs, &c. &c.

For Sale.

The wool of 1000 sheep, estimated at 4 lbs. (in the dirt,) per head,.....4000 lbs.
An increase of 400 head of sheep, after making allowance for casualties, the use of the farm, &c.....400 head.

Supposing every thing made on the farm, except the wool and the increase of the sheep, to be consumed, we shall have for sale—

4000 lbs. of wool in the dirt, at 25 cents per lb.—equal to.....$1000
400 lambs and muttons, at $1 50 per head,.....600

Gross sales,.....$1600
From which deduct—
For permanent and occasional labor, $200
For contingencies,.....200
400

Net profit,.....$1200

Being ten per cent. on the original investment. I will only add that this amount might, of course, be very much increased, by improving the quality of the wool. W. H. F.

Journal of a Visit

TO the principal Vineyards of Spain and France, giving a minute account of the different methods pursued in the cultivation of the Vine and the manufacture of Wine—by James Busby, Esq.—Price 50 cents. For sale by
aug 15 HOYT & PORTER.

Mulberry Seed.

JUST received at the Rochester Seed Store, a quantity of new *White Italian Mulberry Seed*, gathered within the last three weeks.

As this is a good season of the year for sowing the seed, persons desirous of commencing the silk business, or increasing their present stock, will do well to obtain some of this seed, which we know is perfectly new. REYNOLDS & BATEHAM.
Rochester, July 25, 1835.

Cattle.

I WILL sell, if applied for soon, or previous to 1st October next, from 20 to 30 good native cows, in calf to a prime *pure blooded, improved*, Short Horn Durham bull. Stock of the bull has been fully tested as being of the first quality, as I have now about 20 of his calves from the above mentioned cows. The calves of course will be half blooded, and from the specimens now in my possession, are worth three or four times the value of common cattle. The cows are in fine condition, and are good animals of the kind.

I will also sell 6 or 8 very fine half blood Durham Bull Calves, from 4 to 5 months old, and now about the size of common yearlings, having had no extraordinary keeping.

The prices of these animals, either the cows or calves, will be from 20 to 30 dollars, according to quality and condition.

Apply to me at Buffalo, or to J. H. Lathrop at White Haven, on Grand Island, where the cattle may be seen. L. F. ALLEN.

The Silk Culturist, & Farmer's MANUAL.

"THE object of this publication is to disseminate a thorough knowledge of the cultivation of the Mulberry Tree in all its varieties, the rearing of Silk Worms, the production of Cocoons, and the reeling of silk in the most approved method."

It will also contain interesting matter on Agricultural subjects generally.

Published monthly at Hartford, Conn., by the Hartford County Silk Society, at 50 cents per year, in advance. Subscriptions received at the Rochester Seed Store, by
july 25 REYNOLDS & BATEHAM.

A Valuable Farm for Sale.

ON the Ridge Road, south side, two miles from the canal, in the town of Murray, Orleans county, upwards of 200 acres, 130 highly cultivated, about 100 acres wheat now in the ground, besides oats, corn, potatoes, &c.—buildings large and convenient. This is desirable property, being situated on the best road in this state,—the soil varied, and every variety of the richest kind. The situation too is delightful. Price moderate—terms easy. Inquire on the premises of W. B. ILES.
july 11-frtf

Election Notice.

SHERIF'S OFFICE, Monroe co., }
Rochester, August 12, 1835. }

A GENERAL ELECTION is to be held in the county of Monroe on the second, third and fourth days of November next, at which will be chosen the officers mentioned in the notice from the Secretary of State, of which a copy is annexed.
ELIAS POND, Sherif.

STATE OF NEW YORK, }
Secretary's Office. } Albany, August 1, 1835.

Sir—I hereby give you notice, that at the next general election in this state, to be held on the 2d, 3d and 4th days of November next, a Senator is to be chosen in the eighth senate district, in the place of Chauncey J. Fox, whose term of service will expire on the last day of December next.

Notice is also given, that at the said election the following proposed amendments to the constitution of this state will be submitted to the people viz:

For restoring the duties on goods sold at auction, and the duties on salt to the general fund.

JOHN A. DIX, Secretary of State.

To the Sherif of the county of Monroe.

N. B. The Inspectors of Election in the several towns in your county will give notice of the election of Members of Assembly, and for filling any vacancies in county offices which may exist. aug 15

The Worm and the Flower.

BY J. MONTGOMERY.

You're spinning for my lady, Worm,
Silk garments for the fair;
You're spinning rainbows for a form
More beautiful than air;
When air is bright with sunbeams,
And morning mists arise
From woody vales and mountain streams,
To blue autumnal skies.

You're training for my lady, Flower!
You're opening for my love
The glory of her summer bower,
While sky-larks soar above.
Go, twine her locks with rose-buds,
Or breathe upon her breast;
While zephyrs curl the water floods,
The rock the halcyon's nest.

But Oh! there is another worm
Ere long will visit her,
And revel on her lovely form
In the dark sepulchre:
Yet from that sepulchre shall spring
A flower as sweet as this:
Hard by the nightingale shall sing,
Soft winds its petals kiss.

Frail emblems of frail beauty, ye,
In beauty who would trust;
Since all that charms the eye must be
Consigned to worms and dust.
Yet like the flower that decks her tomb,
Her soul shall quit the clod,
And shine in Amaranthine bloom
Fast by the throne of God!

Flowers.

With each expanding flower we find
Some pleasing sentiment combined:
Love in the myrtle bloom is seen,
Remembrance to the violet clings,
Peace brightens in the olive's green,
Hope from the half closed iris springs,
And victory to the laurel glows,
And woman blushes in the rose.

Rural Life.

We have been described, and with some justice by foreigners, as a calculating, money-making people;—as a nation of utilitarians—looking always to the main chance, and caring little for those things which contribute to the adornment and refinement of existence. We have a magnificent country, but as yet art has done but little to improve it; and except in the immediate neighborhood of our large cities, a handsome, well kept country residence is rarely seen. Refinement and elegance have not yet followed wealth into the interior. There are in our own State very many rich and highly cultivated farms, situate in regions picturesque and beautiful. But the hand of industry has been employed for the most part to deface, not to improve the charms of nature. The fields wave with luxuriant crops—the pastures are studded with fine cattle,—every thing wears an appearance of abundance and prosperity. But there is a want of taste—all is done for profit, nothing for beauty. The house of the wealthy farmer is usually a plain structure, without an attempt at ornament: on one side is an apple orchard, on the other, the barn, and in front, a small kitchen garden, stocked with the commonest vegetables. A little *taste* to appreciate the more refined enjoyments of life, a little knowledge of horticulture, and a little expense and attention, would have made his mansion agreeable to the eye as well as convenient for use--would have surrounded it with a verdant lawn and spreading trees, and would have filled his orchards and gardens with abundance and variety of fruits, vegetables and flowers. This is perhaps reserved for another generation. We are a young country, and but a few years has passed since the forest shaded the fields where now the harvest ripens. The rough work must be done first, and the foundation laid before the superstructure can be effected.

Wealth however is rapidly accumulating, and we are glad to perceive a growing fondness for the pursuits of the country. No taste is purer—none more elevating than that which urges us to the constant contemplation of the wonders and beauties of nature. If our wealthy citizens, instead of flying to crowded watering places, there to repeat the same insipid social game which fatigued them in the winter, would occupy their leisure, interest their minds, and spend their money, in the cultivation and improvement of country seats, they would contribute much to the adornment of our State, to the refinement of our agricultural population, and perchance discover that a few months passed amid the tranquil beauties of the country, and in its healthful and interesting occupations would contribute more to rational enjoyment and intellectual elevation, than the excitements of city dissipation, the degrading turmoil of politics, or the harassing cares of business.

"O friendly to the best pursuits of man,
Friendly to thought, to virtue and to peace,
Domestic life in rural leisure passed!
Few know thy value, and few taste thy sweets;
Tho' many boast thy favors, and affect
To understand and choose thee for their own.
But foolish man forgets his proper bliss
E'en as his first progenitor, and quits,
Though placed in paradise, (for earth has still
Some traces of her youthful beauty left,)
Substantial happiness for transient joy."

ANECDOTE OF A HEN.—The antipathy of the hen to water is well known, yet the following is a curious instance of habit overcoming nature: A hen who had reared three broods of ducks in three successive years, became habituated to their taking to the water, and would fly to a large stone in the middle of the pond, and patiently and quietly watch her brood as they swam about it. The fourth year she hatched her own eggs; amd finding that her chickens did not take to the water as the ducklings had done, she flew to the stone in the pond, and called them to her with the utmost eagerness. This recollection of the habits of her former charge, though it had taken place a year before, is not a little curious.

HORTICULTURAL ANOMALY.—The Shaddock fruit always contain 32 seeds. The seeds have been experimentally planted a number of times, and it is invariable found that there are never more than *two* out of thirty two, that produce like fruit. The others produce, some sweet oranges, some bitter, and some the forbidden fruit, which are all, with the shaddock, varieties of the orange species. The leaves are similar in appearance, and until the trees are actually in bearing. it is impossible to know what the fruit is likely to prove.

The annual revenues of Prince Esterhazy, in Hungary, are estimated at 2,000,000 silver florins. His debts, or rather those of his father, amount to 18,000,000 florins. His property is at present under sequestration. He possesses about 3,000,000 sheep, whose wool annually produces an immense sum. It is related, that when Prince Esterhazy was Ambassador from Austria to England, he one day heard a young nobleman boasting that he had on his estates 30,000 sheep: "And I," said Prince Esterhazy, have 30,000 shepherds." This was no exaggeration.

FLOWER MARKETS.—These in Paris are held four times each week, during the summer, and form an object of great interest to both strangers and residents. At a reasonably early hour, on market day, may be seen here collected the most choice flowers and most beautiful women, the good taste of the one refined by the delicacy of the other. If such a market were to be instituted here and held beneath the shade of the graceful elms in our Mall, from six to 10 o'clock every Saturday morning, our florists would soon make it attractive to the beaux and belles, and would find a ready sale for their charming productions. —*London paper.*

No less than four barns, with valuable contents, were destroyed by lightning week before last, during one storm, in Burlington county, N. J.

Important to Owners of Saw MILLS.

THE subscriber having engaged in the manufacture of "RICH'S PATENT SAW MILL DOGS," after using them in his Saw Mill in Lockport, and becoming well satisfied that they will add at least twenty per cent. to the nett profits of any Saw Mill, by using them instead of the Mill Dog now in common use, has no hesitation in offering them as one of the greatest improvements, as a labor-saving machine, lately introduced. The following is the advertisement of patentee, and upon experiment it will be found, that he does not recommend the Dogs as high as they will bear.

Rich's Patent Saw Mill Dogs.

Important to Owners of Saw Mills and Dealers in Lumber.

THE subscribers now offer for sale the above articles, which possess the following advantages over the Mill Dog now in general use, viz:

1st. The lumber by the use of these dogs, is sawed without any stub shot.

2d. These dogs are self-setting, no attention is required as to the removal of the log to fix the thickness of the board or plank to be cut, this being done by the machinery of the dogs, with an accuracy and expedition that cannot be gained by the usual method of setting by the eye or gauge.

3d. It is generally allowed by Sawyers who have seen these dogs in operation, that the labor of one person is all that is required in a saw mill.

4. By a fair calculation it is considered that about every tenth board is gained in time, that is to say, one tenth more lumber can be sawed in a given time by the use of these dogs, than can be sawed by the use of the old fashioned article, or common mill dog.

5th. These dogs enable the sawyer to make an article so much more true and even than that generally brought to market, sawed by the use of the old fashioned dog, that it already commands a price above the lumber sawed by the latter method, as will be seen by reference to the advertisements of several dealers in lumber.

We wish as much as possible to avoid the ridiculous practice of puffing a patent article, and at the same time give the patent in question a fair recommendation, and such a statement of its worth and utility as it fairly merits, and we can feel safe in guaranteeing the fulfilment of. We therefore respectfully solicit the attention of all who are concerned in the making of lumber, to the statements contained in this article, and particularly those made by disinterested persons.

"We, the undersigned, Lumber Merchants in the village of Ithaca, having examined the lumber sawed in the mills in which the above patent Dogs are used, do hereby offer to all those who have that quality of lumber to sell in our market, 50 cents per thousand feet on 1st and 2d quality, and 25 cents per thousand on 3d and 4th quality, over and above the market price for said qualities of lumber sawed by the usual method or old fashioned dogs.

Willliams & Brothers, Benj. K. Delavan,
E. R. Ives & Co. N. Philips & Co.
Ebenezer Vickery, James O. Towner,
B. A. Potter, Harley Lord."

Ithaca, March 6, 1835.

The Patentee says that "*one tenth more lumber can be sawed in a given time by the use of these Dogs, than can be sawed by the use of the old fashioned article.*" Now this is not saying enough, for by *experiment* I am satisfied that *one fifth* more can be sawed in a given time, than by the old dog; and after the log is slabbed and thrown down ready for cutting into boards, *one third* more was sawed, in the same time, in my mill, than with the old dog. *It was tested fairly.* The Saw Mill is a double one; on one carriage was the old dog, and on the other the patent dog, both saws have the same speed, yet the advantage of self-setting, and not having to undog the log, caused an actual gain of *more than one third;* and besides, the lumber was sawed with much greater precision.

Mill owners in the counties of Livingston, Monroe, Genesee, Orleans, Erie or Niagara, can be supplied by applying to the subscriber at Lockport.

☞ If any purchaser is not suited with the Dogs after experiment, no payment will be required.

L. A. SPALDING, *Lockport, Niagara co.*

Lockport, 6th month 25, 1835.

☞ Apply to ROBERT SEDGWICK, Rochester, and to the Saw Mill of GRIFFITH, BROTHERS & SON, near the Falls, for a specimen of the Dogs. aug 8–r3m4t

Fisher on the Vine.

OBSERVATIONS on the Culture of the European Vine, to which is added a Manual of the Swiss Vignerons and the art of Wine making, translated from the French—Price 75 cents. For sale by
june 20 HOYT & PORTER.